

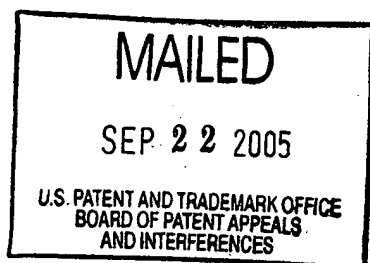
The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

## UNITED STATES PATENT AND TRADEMARK OFFICE

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### BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex parte HAYAO WATANABE and  
ATSUSHI HORIKOSHI

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Appeal No. 2005-1981  
Application No. 09/885,942

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HEARD: September 13, 2005

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Before RUGGIERO, DIXON, and MACDONALD, Administrative Patent Judges.  
RUGGIERO, Administrative Patent Judge.

### DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 31-33 and 37-39.  
Claims 1-24 have been allowed and claims 25-30 and 34-36 have been canceled.

The claimed invention relates to a sealed actuator including a motor stator attached to a housing, a motor rotor disposed opposite to a surface of a magnetic pole of the motor stator, and an encoder for measuring displacement of the motor rotor. Further included is

a hermetically sealing partition wall made of nonmagnetic metal disposed in the gap between the motor stator and the motor rotor with the partition wall being reinforced by reinforcing members. The rotation shaft of the motor rotor is rotatably supported to the housing by bearings which are disposed on opposites sides of the partition wall in a longitudinal direction of the motor rotor so that a load applied to the bearings is directly received by the housing.

Claim 31 is illustrative of the invention and reads as follows:

31. A sealed actuator comprising:

a motor stator including a stator magnetic pole excited by a rotation-drive coil;

a housing to which said motor stator is attached;

a motor rotor including a rotor magnetic pole disposed opposite to a surface of said stator magnetic pole through a gap;

an encoder for measuring displacement of said motor rotor; and

a hermetically sealing partition wall made of a nonmagnetic metal material and disposed at the gap between said stator magnetic pole and said rotor magnetic pole, a space where said motor rotor is disposed being hermetically isolated from a space where said motor stator is disposed;

wherein said sealed actuator further comprises reinforcing means for reinforcing at least a part of said hermetically sealing partition wall, said reinforcing means being made of the same nonmagnetic metal material as said partition wall, wherein said partition wall is disposed between said reinforcing means and said motor rotor.

The Examiner relies on the following prior art references:<sup>1</sup>

Cametti et al. (Cametti)	2,887,062	May 19, 1959
Jacquin	FR 2527854	Dec. 02, 1983
Hofmeister	WO 94/23911	Oct. 27, 1994

Claims 31-33 and 37-39, all of the appealed claims, stand finally rejected under 35 U.S.C. § 112, first paragraph, as being based on an inadequate disclosure. Claims 31-33 and 37-39 also stand finally rejected under 35 U.S.C. § 103(a). As evidence of obviousness, the Examiner offers the admitted prior art in view of Cametti and Hofmeister with respect to claims 31, 32, 37, and 38, and adds Jacquin to the basic combination with respect to claims 33 and 39.<sup>2</sup>

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs<sup>3</sup> and Answer for the respective details.

### OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the Examiner, the arguments in support of the rejections and the evidence of

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<sup>1</sup> In addition, the Examiner relies on Appellants' admissions as to the prior art appearing in Figure 7 and the accompanying description beginning at column 3, line 24 of the '548 patent.

<sup>2</sup> As indicated at page 8 of the Answer, the Examiner has withdrawn the 35 U.S.C. § 102(b) rejection of claims 31, 32, 37, and 38 based on the admitted prior art as well as the alternative 35 U.S.C. § 103(a) rejection of claims 31, 32, 37, and 38 as being unpatentable over the admitted prior art in view of Hofmeister.

<sup>3</sup> The Appeal Brief was filed June 10, 2004. In response to the Examiner's Answer mailed August 18, 2004, a Reply Brief was filed October 15, 2004 which was acknowledged and entered by the Examiner as indicated in the communication mailed November 15, 2004.

obviousness relied upon by the Examiner as support for the prior art rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that Appellants' specification in this application describes the claimed invention in a manner which complies with the requirements of 35 U.S.C. § 112. We are also of the view that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 31-33 and 37-39. Accordingly, we reverse.<sup>4</sup>

We consider first the Examiner's rejection of claims 31-33 and 37-39 under the "written description" requirement of the first paragraph of 35 U.S.C. § 112. The function of the written description requirement of the first paragraph of 35 U.S.C. § 112 is to ensure that the inventor has possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him. In re Wertheim, 541 F. 2d 257, 262, 191 USPQ 90, 96 (CCPA 1976).

In establishing a basis for a rejection under the written description requirement of the statute, the Examiner has the initial burden of presenting evidence or reasons why

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<sup>4</sup> We agree with the Examiner (Answer, 7) that the objection to the drawings is not an appealable issue. In view of our decision in this appeal, however, the Examiner should reconsider the refusal to enter the proposed drawing of Figure 8.

persons skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. Wertheim, 541 F.2d at 265, 191 USPQ at 98. After reviewing the arguments of record, it is our opinion that the Examiner has not provided sufficient reasons or evidence to satisfy such burden.

The Examiner takes the position that Appellants' disclosure lacks a "written description of an encoder as a displacement measuring means." (Answer, page 3). According to the Examiner (Answer, pages 5-7), the only disclosure by Appellants of optical and magnetic encoders being used for displacement measuring is by comparison with reluctance resolvers. The Examiner draws the conclusion (id.) that Appellants' disclosure, which describes the advantages of using a resolver for displacement measurement when operating in a high-vacuum environment, "teaches away" from the use of optical and magnetic encoders in Appellants' intended high-vacuum environment.

We agree with Appellants, however, that the Examiner is improperly and without basis interpreting Appellants' disclosure as being limited to high-vacuum environments. In our view, while Appellants' disclosure may discuss the difficulties in using optical and magnetic encoders in a vacuum environment, the disclosure is not limited to sealed actuators used in a vacuum. We find to be compelling Appellants' arguments (Brief, pages 8-10) setting forth instances in the disclosure which indicate that, while use of the described sealed actuator in high-vacuum environment may be a preferred embodiment, it is clearly not the only described use of such sealed actuators.

Further, as pointed out by Appellants (Reply Brief, page 5), the Examiner's arguments to the contrary notwithstanding, Appellants' disclosure does discuss problems associated with sealed actuators which are not associated with a particular environmental use, such as the problems concerning the interaction of the rotor bearings and the partition wall. We also make the observation that there is nothing in the language of the appealed claims which limits the sealed actuator to use in any particular environment.

In view of the above discussion, it is our opinion, under the factual situation presented in the present case, the statutory written description requirement has been satisfied because Appellants were clearly in possession of the invention at the time of filing of the application. Therefore, we do not sustain the rejection of claims 31-33 and 37-39 under the "written description" clause of the first paragraph of 35 U.S.C. § 112.

We next consider the Examiner's 35 U.S.C. § 103(a) rejection of claims 31, 32, 37, and 38 based on the combination of the admitted prior art, Hofmeister, and Cametti. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some

teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

With respect to the Examiner's 35 U.S.C. § 103(a) rejection of independent claim 31, Appellants assert that the Examiner has failed to establish a prima facie case of obviousness since all of the claimed limitations are not taught or suggested by the applied references. In particular, Appellants contend (Reply Brief, page 6) that the Examiner has improperly split the element 216a, described in relation to Figure 7 of the admitted prior art as a "partition wall," into two parts, a "partition wall" and a "reinforcement means."

After reviewing the arguments of record from Appellants and the Examiner, we are in general agreement with Appellants' position as stated in the Briefs. Although the Examiner (Answer, page 10 including the Examiner's illustration) appears to suggest that the portion of the housing 216 in Figure 7 of the admitted prior art which connects the main part of the housing 216 to the expanded part identified as the partition wall 216a can

be considered a "reinforcement means," we find no support in the disclosure of the admitted prior art to support such a conclusion. As asserted by Appellants (Reply Brief, page 6), the only described structure that extends from the housing 216 in the admitted prior art is the partition wall 216a with no disclosure of any additional reinforcing structure.

We have also reviewed the Hofmeister and Cametti references, applied by the Examiner to address, respectively, the encoder structure and partition wall material features of claim 31. We find nothing, however, in either of these references which would overcome the innate deficiencies of the admitted prior art discussed supra. Accordingly, since we are of the opinion that the Examiner has not established a prima facie case of obviousness since all of the claimed limitations are not taught or suggested by the applied admitted prior art, Hofmeister, and Cametti references, we do not sustain the rejection of independent claim 31, nor of claim 32 dependent thereon.

Turning to a consideration of the Examiner's 35 U.S.C. § 103(a) rejection of independent claim 33, we do not sustain the rejection of this claim as well as its dependent claim 38. We agree with Appellants (Brief, page 16; Reply Brief, page 6) that the Examiner has not adequately addressed the language of claim 33 which sets forth a bearing support structure in which a load on the bearings is received directly by the housing. As pointed out by Appellants, in the bearing arrangement disclosed in Figure 7 of the admitted prior art, the load on the bearings is received by the partition wall 216a, not directly on the housing 216.



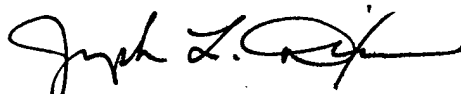
Lastly, we do not sustain the Examiners' obviousness rejection of claims 33 and 39 in which the Jacquin reference has been applied to address the magnetic encoder feature of these claims. A review of the disclosure of Jacquin reveals nothing which would overcome the previously discussed deficiencies of the admitted prior art, Hofmeister, and Cametti.

In summary, we have not sustained the Examiner's rejections of any of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 31-33 and 37-39 is reversed.

REVERSED



JOSEPH F. RUGGIERO  
Administrative Patent Judge



JOSEPH L. DIXON  
Administrative Patent Judge



ALLEN R. MACDONALD  
Administrative Patent Judge

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